Remarks/Arguments

I. Response to Rejections under 35 USC § 102

At page 2, item 3 of the Office Action, claims 1-2, 4-9, 11-14,16-17, 19-22, 24-27, and 29 are rejected under 35 USC§102 as being anticipated by "Mueller" (US patent number 5,463,764). The Applicants respectfully traverse this rejection since the Mueller reference does not disclose all of the elements of the claimed invention.

In Mueller, a method and system for debugging through a keyboard device driver is disclosed. In Mueller, a debugging module on the keyboard device driver is provided. However, at column 4, lines 32 and 33, Mueller very clearly points out that "A typical keyboard controller (27) is a small processor having **two** data ports." Thus, Mueller vary clearly teaches a controller that contrasts with the keyboard controller of the Applicant's amended independent claims, all of which include a "main processor bus" a "secondary bus" and an interface to at least one input device (claim language may vary slightly). Anticipation under §102 "requires the disclosure in a single prior art reference of **each element** of the claim under construction." W.L. Gore & Associates, Inc. v. Garlock, Inc., 220 USPQ 303, 313 (Fed. Cir. 1983).

In particular, claim 1 recites a "main processor bus" at line 5, a "secondary processor bus", at line 7, and "wherein the keyboard controller also includes an interface to an input device", at lines 7-8 of amended independent claim 1. Thus, since the method of claim 1 recites a keyboard controller having **at least three** interfaces, the Applicants assert that the Mueller reference does not teach or suggest all of the limitations of claim 1. Thus, the Applicants respectfully request that the Examiner withdraw the rejection to the claim.

With regard to amended independent claim 9, this claim recites "a keyboard controller that interfaces to an input device", "a secondary bus that interfaces with said keyboard controller", and communicating "debugging information words with said main processor through a main processor bus". These limitations are contrasted with the keyboard controller of Mueller, in which the "typical keyboard controller (27) is a small processor having **two** data ports." Accordingly, as Mueller does not disclose **each element** of claim 9, the Applicants respectfully request that the Examiner withdraw the rejection.

With regard to amended independent claim 16, this claim recites "receiving, by a keyboard controller coupled to said main processor and to an input device", and "said keyboard controller transmitting, through a main processor bus". These limitations are contrasted with the keyboard controller of Mueller, in which the "typical keyboard controller (27) is a small processor having **two** data ports." Accordingly, as Mueller does not disclose **each element** of claim 16, the Applicants respectfully request that the Examiner withdraw the rejection.

With regard to amended independent claim 21, this claim recites "receiving, by a keyboard controller coupled to said main processor and to an input device" and "transmitting, by said keyboard controller, said debugging information word to said main processor through a main processor bus". These limitations are contrasted with the keyboard controller of Mueller, in which the "typical keyboard controller (27) is a small processor having **two** data ports." Accordingly, as Mueller does not disclose **each element** of claim 21, the Applicants respectfully request that the Examiner withdraw the rejection.

With regard to amended independent claim 26, this claim recites "a keyboard controller that interfaces with said main processor", "and interfaces with an input device", and "a secondary bus that interfaces with said keyboard controller". These limitations are contrasted with the keyboard controller of Mueller, in which the "typical keyboard controller (27) is a small processor having **two** data ports." Accordingly, as Mueller does not disclose **each element** of claim 21, the Applicants respectfully request that the Examiner withdraw the rejection.

II. Response to Rejections under 35 USC § 103

At page 4, item 4 of the Office Action, claims 3, 10, 15, 18, 23, and 28 are rejected under 35 USC § as being unpatentable over Mueller (as previously identified herein). Regarding claims 3, 10, 15, 18, and 23, the Examiner alleges that "it would have been obvious to one having ordinary skill in the art to incorporate the teachings of the well-known knowledge into Mueller to have said secondary bus be an inter-integrated circuit bus because one would want to utilize various types of communications channels to meet the requirements of various types of systems". (Actual language may vary slightly.)

The Applicants respectfully assert that the Examiner's broad and vague statement of "various types of communications channels to meet the requirements of various types of systems" falls well short of a prima facie case of obviousness.

A prima facie case for obviousness is established only when the prior art teaches or suggests all of the elements of the claims. (MPEP §2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q2d 1955, 1956 (Fed. Cir. 1993)). At best, the Examiner is asserting the presence of a "general knowledge of techniques" requirement. However, a showing of either a suggestion in the art cited to produce the claimed invention or compelling motivation based on sound scientific principles is required for a showing of obviousness (Ex parte Kranz, 19 USPQ 2d 1216, No. 88-2847, decided June 28, 1990, released February 4, 1991).

The Applicants further assert that Mueller teaches away from the inclusion of an additional interface. The system of Mueller must have an interface to the keyboard, and an interface to the main processor. Thus, given the fact that Mueller teaches that a "typical keyboard controller (27) is a small processor having **two** data ports" (line column 4, lines 32 and 33), one of ordinary skill in the art **would not** include an additional, third data port, (that is, the inter-integrated circuit bus).

Thus, the Applicants respectfully request that the Examiner withdraw the rejection.

With regard to claim 28, the Examiner asserts obviousness of the claimed subject matter since "it would be obvious to one having ordinary skill in the art to incorporate the teaching of the well-known knowledge into Mueller to have the secondary bus additionally communicate with a graphical pointing device because *it provides a user friendly interface. . .*".

The Applicants respectfully call the Examiner's attention to In re Sang Su Lee (277 F.3d 1338, C.A.Fed., 2002) in which the court noted that the term "user friendly" does not adequately address the issue of motivation to combine.

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claimed invention or compelling motivation based on sound scientific principles <u>is</u> required for a showing of obviousness (Ex parte Kranz, 19 USPQ 2d 1216, No. 88-2847, decided June 28, 1990, released February 4, 1991).

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Accordingly, the Applicants respectfully requests that the Examiner withdraw all rejections to the claims and pass this application onto allowance.

III. Additional Fees:

It is not believed that additional fees are due at this time; however, if any additional fee is required in connection with the filing of this Amendment, please charge the fee to Deposit Account No. 08-2025.

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